

REMARKS

Claims 3-22 were in the application and rejected under Section 102 or 103 in view of Christie USP 3,684,868.

While Applicant respectfully traverses the rejections under Sections 102 and 103, Applicant has clarified certain distinctions of Applicant's claimed invention that patentably distinguish Applicant's claimed invention over the cited art.

First, with respect to claims 3-20, Applicant submits that the multi-bit spectral-data encoding of Applicant's invention patentably distinguishes over the technique disclosed in Christie. Applicant's claimed invention utilizes data encoding determined by the intensity of light in one or more spectral bands, where data is encoded in a spectral band based on the measured intensity of light in that spectral band. Thus, a multi-bit data value is determined based on the measured light intensity in a spectral band. This data encoding technique of Applicant's invention, which is reflected in Fig. 98, is directly contrary to the single bit, color transition encoding of Christie (see Christie, col. 3, lines 16-40, etc.). With the Christie technique, no bits of data are encoded based on an intensity value in a single spectral band; instead, Christie teaches away from Applicant's technique by disclosing that a first measurement is made and then a second measurement is made, and a single bit is encoded based on the color transition between the first and second measurements.

Thus, Christie does not disclose or suggest the data encoding technique of Applicant's claims 3-20, and Applicant submits that these claims (as originally presented and amended) are patentably distinguishable over the Christie technique.

Second, with respect to claims 21 and 22, Applicant submits that the multi-band light measurement technique of Applicant's claimed invention also patent distinguishes over the technique disclosed in Christie. Christie discloses application of single band light sources (different LEDs) and a single non-spectral-specific spectral sensor. The LEDs are not used to generate light of multiple spectral bands; rather, the LEDs are alternately energized so that only a single spectral band of light is generated at any given point in time (see, e.g., col. 4, lines 49-53, etc.). In contrast, in addition to other distinctions, Applicant's claimed invention utilizes light consisting of a plurality of spectral bands and a plurality of spectral sensors that measure light in the plurality of spectral bands. With Applicant's claimed invention, multiple spectral bands may

be sensed simultaneously, which is not possible with the Christie technique. Accordingly, Applicant submits that claims 21 and 22 also patentably distinguish over the Christie reference.

No new matter has been added.

Accordingly, Applicant respectfully traverses the outstanding rejections. All claims are submitted to be allowable, and such is respectfully requested.

If there are any further questions regarding this application, Applicant's Attorney requests an opportunity to discuss such matters with the Examiner by way of a telephone interview or in-person interview.

Please charge any additional fees due, or credit any overpayment, to Deposit Account No. 50-0251.

Respectfully submitted,



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I hereby certify that the foregoing is being deposited with the U.S. Postal Service, postage prepaid, to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22312-1450, this 26th day of December, 2003.

